

**Notice of Allowability**

Application No.

09/998,834

Applicant(s)

NEMECEK, CRAIG

Examiner

Hoang-Vu A. Nguyen-Ba

Art Unit

2192

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/23/04.
2. ☒ The allowed claim(s) is/are 1-21.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☒ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 9/20/04.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

*Hoang-Vu A. Nguyen-Ba*

**ANTONY NGUYEN-BA  
PRIMARY EXAMINER**

### **DETAILED ACTION**

1. This action is responsive to amendment filed December 23, 2004.

#### ***Response to Amendments***

2. Per Applicant's request, claims 1-2, 5-6, 8, 10-13, 16-18 and 20-21 have been amended. Claims 1-21 remain pending.
3. Formal drawings are required in reply to this Office action to avoid abandonment of the application. The requirement for formal drawings will not be held in abeyance.
4. The objection to the specification because of identified minor informalities is withdrawn in view of Applicant's amendments to the abstract and the specification to correct these informalities.
5. The objection to claims 2 and 13 is withdrawn in view of Applicant's amendments to these claims to correct identified minor informalities.
6. The rejection of claims 5, 6, 8, 16, 17, 20 and 21 under 35 U.S.C. § 112, second paragraph as being indefinite is withdrawn in view of Applicants' amendments to these claims.

#### ***Response to Arguments***

7. Applicant's arguments, see Remarks, pp. 11-14, filed December 23, 2004, with respect to claims 1-7 and 18-21 have been fully considered and are persuasive. The rejection of these claims has been withdrawn.

#### ***Examiner's Statement of Reasons for Allowance***

8. Claims 1-21 are allowed.

The following is an examiner's statement of reasons for allowance:

The Examiner agrees with Applicant that the prior art of record, i.e., U.S. Patent No. 5,590,354 to Klapproth et al. ("Klapproth"), taken individually or in combination, fails to teach an in-circuit-emulation (ICE) system coupled to a computer system, wherein the ICE emulates the microcontroller, and wherein the ICE is configured to run the microcontroller code cooperatively with the microcontroller to implement the debugging process. Klapproth also fails to teach a debug interface located in a microcontroller for communicatively coupling the microcontroller and the ICE, the interface configured to enable data transmission when the microcontroller is operating at a first speed and to disable data transmission when the microcontroller is operating at a second speed, wherein the first speed is slower than the second speed.

Instead, Klapproth teaches a microcontroller that has a resident or on-chip debug logic as opposed to the microcontroller of the present invention, which is a production microcontroller that is separate from the microcontroller to be debugged. Furthermore, Klapproth fails to teach disabling data transmission while the microcontroller is in a halt state.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Hoang-Vu A. Nguyen-Ba whose telephone number is (571) 272-3701. The Examiner can normally be reached on Tuesday-Friday, 7:15 – 17:45.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Tuan Dam can be reached at (571) 272-3695.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**ANTONY NGUYEN-BA**  
**PRIMARY EXAMINER**

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May 11, 2005